ERRATA.

PART I.

P. 143, l. 3, *for* affraïant, *read* effraïant.

Note from HENRY BROUGHAM, Jun. Esq. author of the paper on the inflection, reflection, and colours of light. See page 227, &c.

" Owing to an error which crept into the integral calculus by which the problems on " the trajectory of light were resolved, two of these solutions are erroneous, and must be " corrected thus: 1. When the bending force is inversely as the distance, the curves to be " squared are, a conic hyperbola, and a logarithmic, $y^2 = \frac{1}{l\frac{a}{x}}$. The trajectory, there- " fore, cannot be found in finite terms; its equation is $\dot{y}^2\, l\frac{a}{x} = \dot{x}^2$; and the sub- " tangent is to the subnormal as 1 to $l\frac{a}{x}$. 2. When the bending force is inversely as " the square of the distance, the curves to be squared are a cubic hyperbola, $y = \frac{1}{x^2}$, " and a cubic conchoid, $y^2 = \frac{x}{a-x}$; therefore the equation to the trajectory is " $(a-x)\,\dot{y}^2 = x\,\dot{x}^2$, which belongs to a *cycloid*, the radius of whose generating circle i " a. In general, if the force be inversely as the mth power of the distance, the equation " of the trajectory will be $(a^{m-1} - x^{m-1})\,\dot{y}^2 = x^{m-1}\,\dot{x}^2$, which agrees also with the " first case, where m being $= 1$, $\underline{a^{m-1}}$, may be esteemed the hyperbolic logarithm " of a."

H. BROUGHAM.

Edinburgh,
July 2, 1796.